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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,082	11/03/2003	Joseph S. Adams	14200	3718
7590	03/09/2005		EXAMINER	
LISA M. SOLTIS ILLINOIS TOOL WORKS INC. 3600 WEST LAKE AVENUE GLENVIEW, IL 60025			WEEKS, GLORIA R	
			ART UNIT	PAPER NUMBER
			3721	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/700,082	ADAMS ET AL.	
	Examiner Gloria R Weeks	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 December 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-27 is/are allowed.
- 6) Claim(s) 28 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

Response to Amendment

1. This action is in response to Applicants' amendment received on December 13, 2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Büchel (USPN 6,425,354).

In reference to claim 28, Büchel discloses a gas combustion-powered apparatus, comprising: a combustion chamber (2), the combustion chamber (1, 2) including a first wall (14) and a second wall (18) moveable with respect to the first wall (14) between a first, collapsed position (figure 5) and a second, expanded position (figure 4) defining a volume between the first (14) and second (18) walls; an ignition source (53) in operable relationship to the combustion chamber (1, 2) for causing an ignition of a combustible gas within the volume; and a fueling apparatus (41, 42) constructed and arranged for injecting a pressurized fuel into the volume at a pressure sufficient to create turbulence in the volume without mechanical assistance or movement of the first and second walls.

Allowable Subject Matter

4. Claims 1-27 are allowed.

Response to Arguments

5. Applicant's arguments filed December 13, 2004 have been fully considered but they are not persuasive.

Applicant has argued that Büchel et al. fails to disclose a fueling apparatus that injects a pressurized fuel into a volume at a sufficient pressure to create turbulence in the volume without movement of the walls defining the volume, as claimed by the Applicant. Although Examiner recognizes that the fueling apparatus of Applicant's invention is angled to direct the fuel at a central area (92) of the rear wall or surface (40), thus improving the mixing of the fuel with the air in the combustion volume, this configuration is not encompassed in the claim language of Applicant's invention. Applicant appears to have relied upon the functional language regarding the force at which the fuel is injected into the combustion volume, rather than structural language. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Büchel et al. is deemed to be capable of injecting a pressurized fuel in to the combustion volume sufficient to create turbulence in the volume without mechanical assistance or movement of the first and second walls.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 3721

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gloria R Weeks whose telephone number is (703) 605-4211. The examiner can normally be reached on 7:30 am - 6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott A Smith can be reached on (703) 308-2190. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

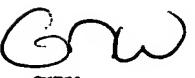
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gloria R Weeks

Examiner

Art Unit 3721


Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700


grw
March 4, 2005